

ABSTRACT OF THE DISCLOSURE

A method of generating a subscriber line differential ringing signal with a DC component includes providing a time-varying supply level, $W(t)$, having a plurality of non-equidistantly spaced critical points along a folding
5 line. $W(t)$ is coupled to the tip line while coupling an alternate source to the ring line in response to a first critical point. $W(t)$ is coupled to the ring line while coupling the alternate source to the tip line in response to a second critical point. An apparatus for generating the ringing signal includes a power supply providing a supply level $W(t) = |f(t) - C| + C + D$, wherein D is a
10 power supply offset, wherein $C \neq 0$. When $W(t) \leq K$ a signal processor controls a linefeed driver to toggle between 1) coupling $W(t)$ to the tip line while coupling the ring line to an alternate supply, $V_{ALT}(t)$, and 2) coupling $W(t)$ to the ring line while coupling the tip line to $V_{ALT}(t)$, wherein K is a pre-determined switching threshold.